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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/574,220

07/07/2006

Tatsuo Tsutsui

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EXAMINER

BOSWORTH, KAMI A

ART UNIT

PAPER NUMBER

4177

NOTIFICATION DATE

DELIVERY MODE

06/17/2008

ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

gbpatent@gbpatent.com
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Office Action Summary	Application No. 10/574,220	Applicant(s) TSUTSUI, TATSUO	
	Examiner KAMI A. BOSWORTH	Art Unit 4177	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 07 July 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-6 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-6 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 31 March 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>7/7/2006</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Specification

1. Applicant is reminded of the proper language and format for an abstract of the disclosure.

The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.

2. The abstract of the disclosure is objected to because it is greater than 150 words in length. Correction is required. See MPEP § 608.01(b).
3. The disclosure is objected to because of the following informalities: On page 18, line 23, pump is incorrectly referenced with the number 8, but it should be referenced with the number 2.

Appropriate correction is required.

Claim Objections

4. Claim 1 is objected to because of the following informalities: line 15 should read "a side of the cutter", but incorrectly reads "this side of the cutter". Appropriate correction is required.
5. Claim 2 is objected to because of the following informalities: line 6 should read "a side", but incorrectly reads "this side". Appropriate correction is required.

Claim Rejections - 35 USC § 102

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

7. Claims 1 and 2 are rejected under 35 U.S.C. 102(b) as being anticipated by Coccozza (US Pat 4,013,075).

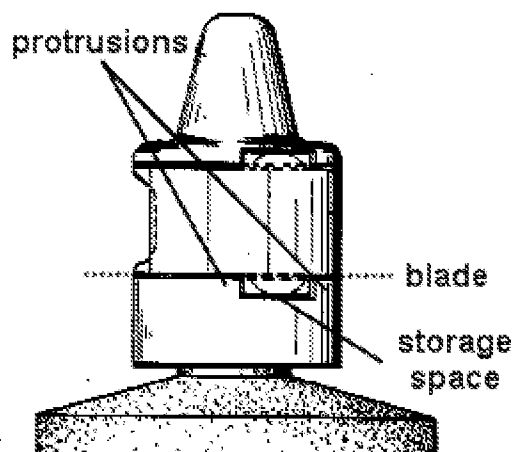
8. Re claim 1, Coccozza discloses a device ("insufflator" best seen in Fig 9) to deliver a powdery medicine (Col 4, lines 6-7) for nasal cavity for spraying a powdery medicine filled in a capsule 13 (Fig 9) by loading a capsule between a connection port 37 (Fig 10) on the side of a nozzle 32 (Fig 10) for spraying the powdery medicine into the nasal cavity and a connection port 35 (Fig 10) on the side of a pump 33 (Fig 9) for supplying spray air (Col 4, lines 23-25) to the nozzle, the capsule being formed with holes (formed after cutting; Col 1, lines 61-63) on both ends in communication with both of the connection ports and supplying spray air from the pump through the inside of the capsule to the nozzle, characterized in that a capsule holder 12 (Fig 15) for holding the capsule filled with the powdery medicine slidably (Col 3, lines 18-20) in the longitudinal direction thereof and loading the same between the connection port on the side of the nozzle and the connection port on the side of the pump is placed moveably forward and backward relative to a loading position (when capsule 13 is in line with cavities 35 and 37; Col 3, lines 67-68) of the capsule, a cutter 20, 20' (Fig 13 & 14) for partially cutting off both ends of the capsule that moves forward to the loading position while being held

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by the capsule holder to make holes on both ends (Col 3, lines 63-64) thereof is placed, and a positioning guide 11 (Fig 11) is located on a side of the cutter for guiding both ends of the capsule that moves forward to the loading position while being held by the capsule holder and causing the capsule to slide as far as a predetermined position (capsule holder 12 abuts protrusions 19 of the positioning guard 11; Col 13, lines 24-27).

9. Re claim 2, Cocozza discloses a pair of blades 20, 20' (Fig 13 & 14) secured in parallel with each other with the blade tips being directed to the direction opposing the advancing direction of the capsule holder, and the positioning guide includes a pair of protrusions (best seen in Fig A below) opposed to each other and a storage space 30 (Fig 9) is formed between the blade and the protrusions placed on a side thereof for discharging cut ends of the capsule cut off by the blades.

Fig A



Claim Rejections - 35 USC § 103

10. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

11. Claims 3, 4, and 6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Coccozza in view of Bougamont et al. (US Pat 5,651,359).

12. Re claims 3 and 6, Coccozza discloses all the claimed features except the distance between the connection ports is shorter than the length of the capsule so that both ends of the capsule are pressed by the peripheral portions of both of the connection ports.

Bougamont et al., however, teaches, that the distance between the connection port on the side of the nozzle and the connection port on the side of the pump is made shorter than the length of the capsule after cutting off the both ends by the cutters so that both ends of the capsule loaded between them are pressed by the peripheral portions of both of the connection ports (Col 5, lines 27-34) for the purpose of ensuring no spray air leaks from the device thus ensuring the most medicine possible is discharged to the user.

Therefore, it would have been obvious to one of ordinary skill at the time of the invention to modify Coccozza with a shortened distance that allows for both ends of the

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capsule to be pressed by the peripheral portions of both of the connection ports, as taught by Bougamont et al., for the purpose of ensuring no spray air leaks from the device thus ensuring the most medicine possible is discharged to the user.

13. Re claim 4, Cocozza discloses a device ("insufflator" best seen in Fig 9) to deliver a powdery medicine (Col 4, lines 6-7) for a nasal cavity for spraying a powdery medicine filled in a capsule 13 (Fig 9) by loading a capsule between a connection port 37 (Fig 10) on the side of a nozzle 32 (Fig 10) for spraying the powdery medicine into the nasal cavity and a connection port 35 (Fig 10) on the side of a pump 33 (Fig 9) for supplying spray air (Col 4, lines 23-25) to the nozzle, the capsule being formed with holes (formed after cutting; Col 1, lines 61-63) on both ends in communication with both of the connection ports and supplying spray air from the pump through the inside of the capsule to the nozzle, characterized in that a capsule holder 12 (Fig 15) for loading the capsule filled with the powdery medicine (Col 3, lines 18-20) between the connection port on the side of the nozzle and the connection port on the side of the pump is placed moveably forward and backward relative to a loading position (when capsule 13 is in line with cavities 35 and 37; Col 3, lines 67-68) of the capsule, a cutter 20, 20' (Fig 13 & 14) for partially cutting off both ends of the capsule that moves forward to the loading position while being held by the capsule holder to make holes on both ends (Col 3, lines 63-64) thereof is placed. Cocozza, however, does not disclose the distance between the connection ports is shorter than the length of the capsule so that both ends of the capsule are pressed by the peripheral portions of both of the connection ports.

Bougamont et al., however, teaches that the distance between the connection port on the side of the nozzle and the connection port on the side of the pump is made shorter than the length of the capsule after cutting off both ends by the cutter, so that both ends of the capsule loaded between them are pressed by peripheral portions of both of the connection ports (Col 5, lines 27-34) for the purpose of ensuring no spray air leaks from the device thus ensuring the most medicine possible is discharged to the user.

Therefore, it would have been obvious to one of ordinary skill at the time of the invention to modify Coccozza with a shortened distance that allows for both ends of the capsule to be pressed by the peripheral portions of both of the connection ports, as taught by Bougamont et al., for the purpose of ensuring no spray air leaks from the device thus ensuring the most medicine possible is discharged to the user.

14. Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Coccozza and Bougamont et al. in view of Ohki et al. (US Pat 6,341,605).

15. Re claim 5, Coccozza and Bougamont et al. disclose all the claimed features except the diameter of each hole formed on the capsule by the cutter being larger or the same size as the diameter of each connection port opening in communication with the hole.

Ohki et al., however, teaches, the diameter of each hole formed on the capsule by the cutter is larger than the diameter of each connection port opening (as seen in Fig 8; Col 6, lines 47-51; Col 8, lines 36-39) for the purpose of controlling the flow rate of the spray air stream delivered through the capsule.

Therefore, it would have been obvious to one of ordinary skill at the time of the invention to modify Coccozza and Bougamont et al. with a capsule hole diameter larger than the connection port diameter, as taught by Ohki et al., for the purpose of ensuring the spray air delivered through the capsule is a controlled stream and thus capable of discharging the most powdery medicine possible.

Conclusion

16. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Horlin (PG PUB 2001/0020472) discloses a device that delivers a powdery medicine contained within a capsule by cutting the capsule with parallel blades; Horlin also discloses the diameter of the hole made by cutting the capsule can be larger than the diameter of the openings of connection ports. Pera (PG PUB 2002/0162552) discloses a device that delivers a powdery medicine contained within a capsule by cutting the capsule with parallel blades; Pera also discloses a storage space for discharging cut ends of the capsule. Ohki et al. (US Pat 5,989,217), Ohki et al. (US Pat 5,921,236), and Ohki et al. (US Pat 5,899,202) disclose pump-powered devices that deliver a powdery medicine contained within a capsule by piercing the capsule. Ohki et al. (PG PUB 2002/0033177), Ohki et al. (US Pat 6,408,846), Pera (US Pat 6,772,755), and Lundquist (US Pat 4,105,027) disclose devices that deliver a powdery medicine contained within a capsule by piercing the capsule. Matsugi et al. (PG PUB 2002/0158150), Haaije de Boer et al. (PG PUB 2003/0015195), and Coccozza (US Pat 5,250,287) disclose pump-powered devices that deliver powdery medicine.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to KAMI A. BOSWORTH whose telephone number is (571)270-5414. The examiner can normally be reached on Monday - Thursday, 8:00 am to 4:00 pm EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Quang D. Thanh can be reached on (571)272-4982. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/K. A. B./
Examiner, Art Unit 4177

/Terrell L Mckinnon/
Supervisory Patent Examiner, Art Unit 4148